U. S. FOREST SERVICE

RESEARCH NOTE LS-2

KE STATES FOREST EXPERIMENT STATION • U. S. DEPARTMENT OF AGRICULTURE

Visitor Reaction to Timber Harvesting in the Boundary Waters Canoe Area

Robert Marshall, for whom the Bob Marshall Wilderness Area of Montana is named, contributed much to the development of the National Forest Wilderness Areas, particularly the shift to more stringent controls on commodity uses (logging, grazing, water power). It is often forgotten that he also proposed areas where recreational trips under primitive conditions would be possible, but where some logging and other uses would be allowed.[1] In fact, he called this type "wilderness areas" and the more restricted areas "primeval areas."

The Boundary Waters Canoe Area of the Superior National Forest is the only National Forest location managed as a "wilderness area" in Marshall's terms. About two-thirds of it is available for logging under restrictions designed to maintain primitive travel conditions (fig. 1). The 1930 Shipstead-Newton-Nolan Law prohibited logging generally in a zone 400 feet back from navigable waterbodies and near portages. This restriction was extended by the Forest Service to include a no-cut zone along the Canadian border (fig. 1), and the uncut strips were extended where topography would expose logging to canoeists and boaters.[2] Under this plan of management a number of timber cutting operations are now under way in the Canoe Area. Adjoining Quetico Park in Canada has similar regulations, but lacks a no-cut zone. However, primarily because of remoteness from markets, only one small area is being cut now.

Some measure of the effectiveness of this unique policy can be obtained from sample interviews conducted with visitors in 1960 and 1961. As a part of a broad study of recreational use of the canoe country in relation to its capacity, over 200 groups visiting the study area (fig. 1) were interviewed at length.[3] One question concerned observation of logging and the reaction to it. Some of those interviewed had travelled through areas where timber was being cut or had been cut recently, but others had visited only areas of virgin timber or turn-of-the century logging. Thus, table 1 presents a cross-section of the visitors' reaction to the effects of the timber-cutting policy in the study area, rather than a direct test of the effectiveness of a screen of uncut timber. Almost all of these people had visited the Boundary Waters Canoe Area, except for the auto campers, about 40 percent of whom only used fringe areas.

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1 *Marshall, Robert. The forest for recreation. In A National Plan For American Forestry, Senate Document No. 12, Separate, No. 6, pp. 473-476. 1933.*

2 *Superior National Forest. Plan of management, Superior Roadless Areas, pp. 14-15. 1948. (Processed.)*

3 *The entire Boundary Waters Canoe Area was sampled during the main summer season.*

4 *Several Forest Service pamphlets describe the logging policy, but the recreation map-folder does not specifically mention it.*

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TABLE 1. — *Visitors' reactions to logging*

Type of recreationist	Not noticed	Noticed, not bothered	Noticed, bothered
Canoeists	71 (92%)	3 (4%)	3 (4%)
Auto campers	56 (74%)	16 (21%)	4 (5%)
Boat campers	17 (81%)	2 (10%)	2 (10%)
Resort guests	42 (86%)	5 (10%)	2 (4%)
Private-cabin users	12 (75%)	3 (19%)	1 (6%)
Day-users	4 (57%)	2 (29%)	1 (14%)
Total	202 (82%)	31 (13%)	13 (5%)

NOTE: Because of rounding, all rows do not total 100 percent.

Very few groups thought they had observed logging (28 percent thought logging in the Boundary Waters Canoe Area was prohibited, and 42 percent did not know what the policy was).[4] Canoeists, who covered more of the area, reported the fewest observations. The explanation for this probably lies in the low local relief and the almost complete concentration of travel on water routes (conditions that are absent in western mountain wilderness, wild, and primitive areas). Two canoeist groups had heard chain saws south of Lake Insula, rather than seen logging, indicating that uncut shoreline strips do not completely eliminate the awareness of active logging.

Even when groups thought they had observed logging, only about 30 percent objected to it.

It should be pointed out that these responses were tabulated at face value, and they contained considerable respondent error. Some people did not understand the terms "logging," or "timber cutting." When this was apparent to the interviewer, a definition was given, but some people probably still applied the concepts to such things as cutting wood for campfires. More important, the question related to the Boundary Waters Canoe Area and the closely related periphery. Therefore, some "observations" may have been based upon logging trucks seen on roads and so on. This seems particularly true for visitors other than canoeists, who tended to ignore the periphery in their replies (another reason for the lower observation rate for canoeists). Probably considerably less than 18 percent of those interviewed actually observed logging in the Canoe Area.

It might be argued that the observation rate is low because only a few areas are being logged now, but this will probably always be true; and areas where cutting is finished will seldom be seen or recognized as unnatural after a few years. Furthermore the heaviest recreational use is in the no-cut zone. Conflicts between different types of recreation may be a more serious problem than conflicts between recreation and other uses. That problem will be considered later in another paper.

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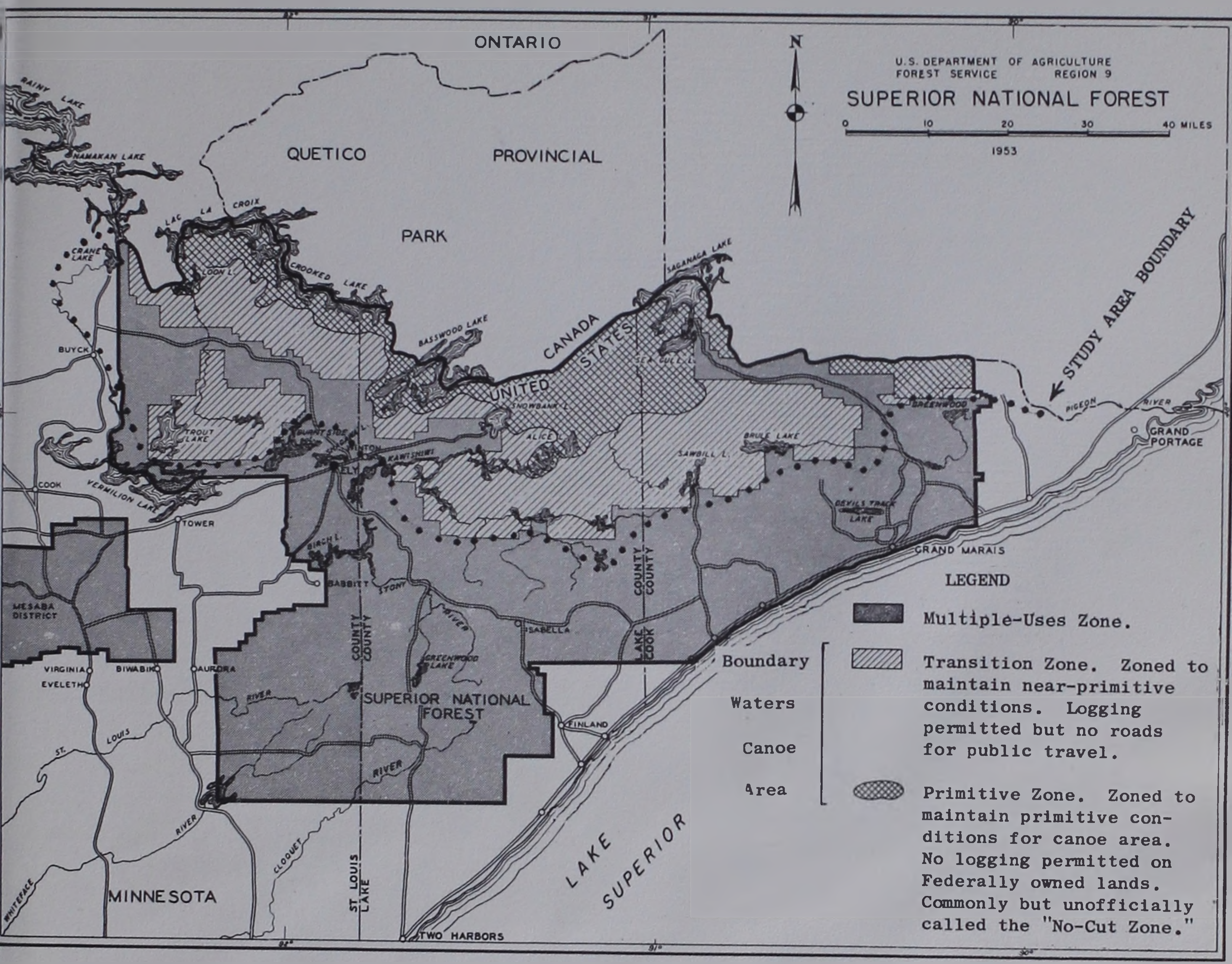

FIGURE 1. — Land use zoning on the Superior National Forest.